

## Amendments to the Claims:

*This listing of claims will replace all prior versions, and listings, of claims in the application:*

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1. (currently amended) A wireless remote control system comprising:  
a wireless transmitter having a button arranged to cause the transmitter to transmit a command signal upon actuation by a user;  
a receiver for receiving the transmitted command signal;  
a signal detector connected to the receiver for detecting the distance of the transmitter from the receiver as a function of the signal strength of the received signal; and  
a controller responsive to the signal detector for performing a first associated function if the transmitter is detected as being within a predetermined range, and a different function if the transmitter is detected as being outside the predetermined range to allow multiple functions to be achieved from a single button on the transmitter wherein activation of the single button causes an unlock function when the transmitter is within the predetermined range and causes a locate function when the transmitter is outside the predetermined range.
  
2. (original) The system of claim 1 wherein the wireless remote control system comprises a remote keyless entry system for a vehicle, said receiver being mounted to the vehicle.
  
3. (original) The system of claim 1 wherein the receiver is arranged to generate an output signal that is proportional to the signal strength of the received command signal.
  
4. (original) The system of claim 1 wherein the receiver comprises a superheterodyne receiver arranged to produce a Received Signal Strength Indicator (RSSI) output.

5. (original) The system of claim 1 wherein the signal detector is arranged to compare the signal strength of the received command signal to a predetermined threshold value indicative of distance from the receiver.

6. (original) The system of claim 5 wherein the signal detector is arranged to compare the signal strength of the received command signal to a plurality of different predetermined threshold values, each indicative of different distance from the receiver, and the controller is arranged to perform a different function for each distance threshold.

7. (original) The system of claim 1 further comprising a signal processor connected to the receiver for determining whether the received command signal is one of a set of commands enabled only for short-range operation, wherein the controller is responsive to the signal processor for performing the function associated with a short-range enabled command signal if the transmitter is detected as being within the predetermined range.

8. (original) The system of claim 1 wherein the transmitter comprises an FM transmitter, the transmitter arranged to transmit the command signal with a narrower FM deviation if the command signal is to trigger operation of the first function, and a wider FM deviation if the command signal is to trigger operation of the other function.

9. (original) The system of claim 1 wherein the transmitter comprises an ASK transmitter, the transmitter arranged to transmit the command signal with a narrower bit width if the command signal is to trigger operation of the first function, and a wider bit width if the command signal is to trigger operation of the other function.

10. (currently amended) A method of remotely controlling operation of at least two different functions in a wireless remote control system, wherein the system includes a transmitter and a receiver, the method comprising:

transmitting a command signal;

receiving the command signal;

detecting the distance of the transmitter from the receiver as a function of the signal strength of the received signal; and

performing a first function if the transmitter is detected as being within a predetermined range, and a different function if the transmitter is detected as being outside the predetermined range to allow multiple functions to be achieved from a single button on the transmitter wherein activation of the single button causes an unlock function when the transmitter is within the predetermined range and causes a locate function when the transmitter is outside the predetermined range.

11. (original) The method of claim 10 wherein receiving the command signal further comprises generating an output signal that is proportional to the signal strength of the received command signal.

12. (original) The method of claim 10 wherein detecting the distance comprises comparing the signal strength of the received command signal to a predetermined threshold value indicative of distance from the receiver.

13. (original) The method of claim 12 further comprising comparing the signal strength of the received command signal to a plurality of different predetermined threshold values, each indicative of different distance from the receiver, and performing a different function for each distance threshold.

14. (original) The method of claim 10 further comprising determining whether the received command signal is one of a set of commands enabled only for short-range operation, and performing the function associated with a short-range enabled command signal if the transmitter is detected as being within the predetermined range.

15. (original) The method of claim 10 further comprising altering a parameter of a command signal to reduce signal strength if the command signal is only enabled for a shorter range.